Title (en)

FLUID APPARATUS WITH ELECTRICALLY CONDUCTIVE VALVE MEMBER

Title (de)

FLUIDVORRICHTUNG MIT ELEKTRISCH LEITENDEM VENTILGLIED

Title (fr)

APPAREIL DE FLUIDE MUNI D'UN ÉLÉMENT DE SOUPAPE ÉLECTRIQUEMENT CONDUCTEUR

Publication

**EP 3369981 B1 20210217 (EN)**

Application

**EP 18158765 A 20180227**

Priority

JP 2017040396 A 20170303

Abstract (en)

[origin: EP3369981A1] Provided is a plug device (100) which includes: a body portion (110); and a valve element portion (120). A fluid flow passage (113) is formed in the body portion (110). The fluid flow passage (113) extends along an axis X1, and has a valve hole (115) at one end thereof. The valve element portion (120) is accommodated in the body portion (110) in an advancing and retracting manner along the axis X1. A proximal end portion (122) of the valve element portion (120) is made of a conductive fluororesin material containing a fluororesin material and carbon nanotubes dispersed in the fluororesin material. The proximal end portion (122) is conductive with a conductive member (140) maintained at a ground potential. A volume resistivity of the conductive fluororesin material falls within a range of larger than 1.0×10 3 ©·cm and less than 1.0×10 4 ©·cm.

IPC 8 full level

**F16L 29/02** (2006.01); **F16L 29/04** (2006.01); **F16L 37/28** (2006.01); **F16L 37/34** (2006.01)

CPC (source: EP KR US)

**C08K 3/041** (2017.04 - KR); **C08L 27/18** (2013.01 - KR); **C08L 27/24** (2013.01 - KR); **F16K 1/32** (2013.01 - US); **F16L 37/23** (2013.01 - KR); **F16L 37/30** (2013.01 - KR); **F16L 37/32** (2013.01 - US); **F16L 37/34** (2013.01 - EP US); **F16L 55/07** (2013.01 - US); **H01R 4/66** (2013.01 - KR); **H05F 3/02** (2013.01 - US)

Cited by

CN110608334A

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 3369981 A1 20180905**; **EP 3369981 B1 20210217**; JP 2018146011 A 20180920; JP 6901873 B2 20210714; KR 102398215 B1 20220513; KR 20180101173 A 20180912; US 10767802 B2 20200908; US 2018252352 A1 20180906

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**EP 18158765 A 20180227**; JP 2017040396 A 20170303; KR 20180013283 A 20180202; US 201815909019 A 20180301